



Highlights, Notes & Study Results Based on Similar Window Insert Products

Sierra Pacific Power Company Gives Grant to Purchase EnergySavr Window Inserts: The Lake Mansion in Reno (www.lakemansion.com), listed on both the national and state historic registers, recently installed EnergySavr Window Inserts after receiving an Energy Conservation Grant from Sierra Pacific Power Company. http://www.sierrapacific.com/news/releases/ShowPR.cfm?pr_id=4590

Cleveland National Register Building Saves 34.7 Percent Using Interior Window Inserts:

“The Celebreeze Federal Building purchases steam to heat the building and chilled water to cool the building. A comparison of the steam and chilled water use from before and after the interior window installation shows a significant reduction in energy consumption, federal officials say. In the year after the interior windows were installed, the building’s steam consumption was reduced by 34.7 percent (see graph, p. 43) and chilled water use was reduced by roughly 6.8 percent.

The Celebreeze building was originally constructed in 1966, when it was typical for the metal frames to be glazed with single-pane glass. Today, industry standards for windows demand insulating glass units and framing have thermal breaks that block the transfer of heat or cold from the exterior of the building to the occupied space.

An interior insulating window is a separate window and frame that works in conjunction with the building’s existing window to act as a dual barrier against the elements. The additional window creates a significant thermal break as well as 2 1/2-to-3 inches of meaningful dead air space that is much greater than the standard 3/4 inch of dead air offered by new insulating glass panels. Interior insulating windows can eliminate 75-to-90 percent of energy-robbing air infiltration and reduce heat loss due to conduction by 40-to-50 percent. They also can reduce noise infiltration by well over 50 percent.” <http://www.glassmagazine.net/articles.php?id=150>

Interior Storm Windows Save More Than 40 Percent in Kansas National Register Building

“... it would appear that the storm windows are reducing the energy consumption by more than 40% - a figure that exceeded the theoretical calculations.”

“Other benefits have resulted from this project cannot be directly measured in dollars. Former hot and cold spots in the building have been greatly reduced. Patron comfort has been noticeably improved both thermally and from reduced street noise level.

In summary, the interior storm window solution not only provided the owner with initial cost savings in installation, but it also reduced fuel consumption, met all functional requirements, and carefully addressed historic preservation concerns.” <http://w3.gsa.gov/web/p/hhttp.nsf/0/1d32d1b6acc07bcc852565c50054b461?OpenDocument>

Three Florida residences reported reduced heating and cooling energy use by 29 percent:

“...Interior storm windows provide a compromise by effectively increasing efficiency by updating single-pane windows at a significant cost savings over window replacement. They are accepted in historic homes whose owners want to retain the original windows. In addition to energy benefits, these windows can improve the window’s sound resistance, reduce condensation and UV light.

According to the Partnership for Advancing Technology in Housing (www.pathnet.org), a test of one brand of interior storm window performed on three Florida residences reported reduced heating and cooling energy use by 29 percent and noticeably reduced interior window condensation. They can function in-place year-round, or they can be removed from windows for fresh air during milder weather.”